

Notice of Allowability

Application No.

10/042,232

Examiner

Tatyana Zalukaeva

Applicant(s)

SIOL, WERNER

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/29/2003.
2. ☒ The allowed claim(s) is/are 1,3-13 and 18-20.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No. <u>12/29/2003</u> | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

Tatyana Zalukaeva
Primary Examiner
Art Unit: 1713

EXAMINER'S AMENDMENT/REASONS FOR ALLOWANCE

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Grueneberg, esq., on January 13, 2004.

The application has been amended as follows:

Cancel claims 14-16.

Claims 14-16 are cancelled since the compound as recited in claim 1 is known per se, and it is the process of making that appears to be non-obvious and is presently is allowed, as per reasons discussed below. However, the compound appears to be essentially the same no matter how it was obtained, see *In re Thorpe*, 227 USPQ 964 (CAFC 1985).

Allowable Claims

2. Claims 1, 3-13 and 18-20 are allowed over the prior art of record.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: JP64-87608

Art Unit: 1713

Mazur et al (US 5,149,642), Emmons (US 5,243,069), Matheisen et al (US 5,219,479) or Thanawalla et al (US 4,618,703), Powanda et al (US 4,859,792) and SU 630249 provide for production of essentially the same compound as claimed in claim 1, however using acid chloride for its synthesis compare to methacrylic anhydride. As discussed in the Specification and using the method of the present invention, high yields can be obtained as shown in the Example at page 9 of the specification (>90%), compare to conventional reactions using acid anhydride. When acid chloride is used the HCl being produced as a secondary product during conversion to the ester, which might add to carbon-carbon double bond if one were present elsewhere in the molecule. The compound of formula (1) of claim 1 represents an asymmetric compound having an acrylate end group ($\text{CH}_2=\text{CHC}(\text{O})\text{O}-$) and a methacrylate end group ($\text{C}(\text{O})\text{CCH}_3=\text{CH}_2$). In contrast to methacrylic acid esters, acrylic acid esters are highly active vinologous carbonyl compounds, which add on free HCl almost quantitatively at temperatures as low as -10°C . See Organic Chemistry p. 569. Applicants further presented a table that shows a high yield of 80 % for the addition of HCl to acrylic acid ethyl ester. This secondary reaction of producing HCl does not exist during the use of methacrylic acid anhydride. Thus, the claimed method for synthesis of asymmetric acrylic acid esters is non-obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 1713

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.

Tatyana Zalukaeva, Ph.D.
Primary Examiner
Art Unit 1713



January 13, 2004